



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Group Art Unit 1614

In re

Patent Application of

Thomas H. Barrows, et al.

Application No. 10/810,518

Confirmation No.: 1213

Filed: March 26, 2004

Examiner: Unknown

“TISSUE ENGINEERED BIOMIMETIC
HAIR FOLLICLE GRAFT”

I, Julie Mallder, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date of my signature.

Julie Mallder
Signature

May 13, 2005
Date of Signature

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR §1.97(b)

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner's attention is directed to the references which are listed on the attached Form PTO/SB/08A and PTO/SB/08B and copies of non-U.S. patent references are attached.

Also, the Examiner's attention is directed to:

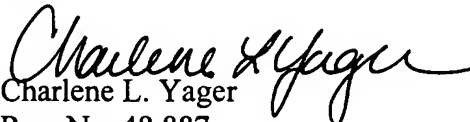
 1. U.S. Patent Application Serial No. 10/804,643, filed March 19, 2004.
Examiner's Initials

Applicants request that the Examiner initial the above once considered.

Citation of these references is respectfully requested.

No concession is made that these documents are prior art, and Applicant expressly reserves the right to antedate the documents as may be appropriate.

Respectfully submitted,

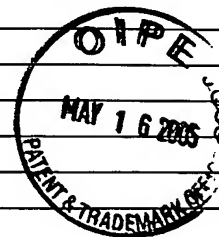

Charlene L. Yager
Reg. No. 48,887

File No. 010414-9012

Michael Best & Friedrich LLP
One South Pinckney Street
P. O. Box 1806
Madison, WI 53701-1806
(608) 257-3501
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			Application Number	10/810,518	
			Filing Date	March 26, 2004	
			First Named Inventor	Thomas H. Barrows	
			Group Art Unit	1614	
			Examiner Name	Unknown	
Sheet	1	of	6	Attorney Docket Number	010414-9012



US. PATENTS				
Examiner Initials		U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document
		2946769	Rose et al.	07/1960
		3025323	Rose et al.	03/1962
		3966766	Lehn	06/1976
		4052988	Doddi et al.	10/1977
		4104195	Ley et al.	08/1978
		4209607	Shalaby et al.	06/1980
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		4242931	Clement	01/1981
		4343931	Barrows	08/1982
		4384061	Reiter et al.	05/1983
		4429080	Casey et al.	01/1984
		4458678	Yannas et al.	07/1984
		4505266	Yannas et al.	03/1985
		4529792	Barrows	07/1985
		4604097	Graves Jr., et al.	08/1986
		4643734	Lin	02/1987
		4719917	Barrows et al.	01/1988
		4851521	della Valle et al.	07/1989
		4919664	Oliver et al.	04/1990
		5091173	Buultjens et al.	02/1992
		5133739	Bezwada et al.	07/1992
		5141522	Landi	08/1992
		5147400	Kaplan et al.	09/1992
		5198507	Kohn et al.	03/1993
		5286837	Barrows et al.	02/1994
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		5415378	Craven	05/1996
		5423778	Eriksson et al.	06/1995
		5486593	Tang et al.	01/1996
		5502092	Barrows et al.	03/1996

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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US. PATENTS				
Examiner Initials		U.S. Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document
		5514378	Mikos et al.	05/1996
		5522841	Roby et al.	06/1996
		5545208	Wolff et al.	08/1996
		5556783	Lavker et al.	09/1996
		5578046	Liu et al.	11/1996
		5599552	Dunn et al.	02/1997
		5639645	Murata	06/1997
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		5697901	Eriksson	12/1997
		5697976	Chesterfield et al.	12/1997
		5721049	Marcolongo et al.	02/1998
		5756094	Lavker et al.	05/1998
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		6031148	Hayes et al.	02/2000
		6051750	Bell	04/2000
		6093200	Liu et al.	07/2000
		6120788	Barrows	09/2000

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US. PATENTS				
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		6147135	Yuan et al.	11/2000
		6159950	Crystal et al.	12/2000
		6303697	Yuan et al.	10/2001
		6333029	Vyakarnam et al	12/2001
		6350284	Tormala et al.	02/2002
		6365172	Barrows	04/2002
		6423252	Chun et al.	07/2004
		6436424	Vogel et al.	08/2002
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		20030195625	Garcia Castro et al.	10/2003
		20030198646	Stenn	10/2003
		20030203003	Nelson et al	10/2003
		20030208138	Olson	11/2003

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US. PATENTS				
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		20030211083	Vogel et al.	11/2003
		20040033598	Vacanti et al.	02/2004
		20040039438	Alt	02/2004
		20040054410	Barrows	03/2004
		20040057937	Jahoda et al.	03/2004
		20040068284	Barrows	04/2004
		20040096514	Vogel	05/2004

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FOREIGN PATENT DOCUMENTS							
Examiner Initials		Country Code	Foreign Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Translation	English Abstract
			CA2140090	Liu et al.	08/1995	Y	
			CA2199918	Bezwada et al.	09/1997	Y	
			EP00845963	Isolagen International	09/2003	Y	
			EP0236014	Univ Dundee	09/1987	Y	
			EP1002859	Isotus B.V.	05/2000	Y	
			EP1083874	Hamilton et al.	01/2004	Y	
			EP1089704	Montanari et al.	02/2004	Y	
			EP1098626	Bradbury et al.	05/2004	Y	
			EP1437042	Shiseido Company Ltd.	07/2004	Y	
			EP405656	Univ Dundee	01/1991	Y	
			EP971679	Gho et al.	06/2002	Y	
			JP3273028	PolyPlasticks	12/1991	N	Y
			JP3328229	Japan Science & Technology Corp.	11/2003	N	Y
			WO199844027	Shea Lonnie, U of Mich	10/1998	Y	
			WO199847471	Gho et al.	10/1998	Y	
			WO199901034	Vogel et al.	01/1999	Y	
			WO199934750	BioAmide Inc.	07/1999	Y	
			WO199962491	Guilford Pharmaceuticals Inc.	06/1998	Y	
			WO200003749	Procter & Gamble Company	07/1999	Y	
			WO200029553	Organogenesis Inc.	05/2000	Y	
			WO200045736	BioAmide Inc.	10/2000	Y	
			WO200062829	Lhommeau Christell, et al.	10/2000	Y	
			WO200158413	Rennebeck Rader et al.	08/2001	N	Y
			WO200166472	Tei Biosciences, Inc.	09/2001	Y	
			WO200170132	Biosphere Medical Inc.	09/2001	Y	
			WO200170289	Biosphere Medical Inc.	09/2001	Y	
			WO200170290	Biosphere Medical Inc.	09/2001	Y	
			WO200170291	Biosphere Medical Inc.	09/2001	Y	
			WO2002060396	BioAmide, Inc.	08/2002	Y	
			WO2002070728	The John Hopkins University	09/2002	Y	
			WO200215952	Barrows	04/2004	Y	

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				Application Number	10/810,518
				Filing Date	March 26, 2004
				First Named Inventor	Thomas H. Barrows
				Group Art Unit	1614
Examiner Name	Unknown				
Sheet	6	of	6	Attorney Docket Number	010414-9012

FOREIGN PATENT DOCUMENTS							
Examiner Initials		Country Code	Foreign Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Translation	English Abstract
			WO2003022043	Shiseido Company Ltd.	03/2003	N	Y
			WO2003104443	Hoffman	12/2003	N	Y
			WO2004044188	Intercytex Limited	05/2004	Y	

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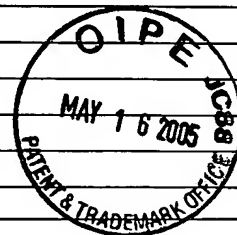
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			Application Number	10/810,518
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	March 26, 2004
			First Named Inventor	Thomas H. Barrows
			Group Art Unit	1614
			Examiner Name	Unknown
(use as many sheets as necessary)			Attorney Docket Number	010414-9012
Sheet	1	of	8	

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
		ARASE, Seigi, <i>et al.</i> , Tokushima J. exp. Med. 36: 87-95 (1989)
		BARROWS TH, Cochran SA, Griffin EI and Solomon AR, "Tissue Engineered Human Hair: Preliminary Clinical Results" TE2002: <i>International Workshop on Tissue Engineering</i> , St. Gallen, Switzerland (February 2002)
		BIOGLASS, http://www.usbiomat.com/bioglass.html 12/28/00.
		CHANG <i>et al.</i> (2004) "Sculpting skin appendages out of epidermal layers via temporally and spatially regulated apoptotic events" <i>J Invest Dermatol</i> 122:1348-1355.
		CHIANG <i>et al.</i> , 1999, "Essential Role for Sonic hedgehog during Hair Follicle Morphogenesis," <i>Dev. Biol.</i> 205:1-9
		COHEN J, "The transplantation of individual rat and guinea-pig whisker papillae," <i>J Embryol Exp Morphol.</i> 1961 Mar;9:117-27.
		COTSARELIS G, Sun TT, Lavker RM. (1990) Label-retaining cells reside in the bulge area of pilosebaceous unit. Implications for follicular stem cells, hair cycle and skin carcinogenesis <i>Cell</i> 61:1329 - 1337.
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		DELEENS, G., <i>et al.</i> , SPIE 39th Ann. Tech. Conf., Boston, MA 5/4-7/81
		DLUGOSZ, (1999), "The Hedgehog and the hair follicle: a growing relationship", <i>The Journal of Clinical Investigation</i> , Vol. 104, 851-853.
		DOMASHENKO, <i>et al.</i> , (2000), "Efficient delivery of transgenes to human hair follicle progenitor cells using topical lipoplex", <i>Nature Biotechnology</i> , Vol. 18, 420-423.
		DU CROS <i>et al.</i> (1995) "Association of versican with dermal matrices and its potential role in hair follicle development and cycling: <i>J Invest Dermatol</i> 105:426-31.
		DYCE <i>et al.</i> , (2004) "Stem cells with multilineage potential derived from porcine skin" <i>Bioche Biophys Res Commun</i> , 316:651-658.
		EBLING FJ, "The biology of hair," <i>Dermatol Clin</i> 1987 Jul;5(3):467-81
		ELSDALE T, and BARD J, (1972) "Cellular Interactions in Mass Cultures of Human Diploid Fibroblasts" <i>Nature</i> 236: 152-155

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
		EVANS, G.R., Brandt, K., Widmer, M.S., Lu, L., Meszlenyi, R.K., Gupta, P.K., Mikos, A.G., Hodges, J., Williams, J., Gurlek, A., Nabawi, A., Lohman, R., and Patrick, C.W. Jr., "In vivo evaluation of poly(L-lactic acid) porous conduits for peripheral nerve regeneration" <i>Biomaterials</i> 20 (1999) 1109-1115.
		FAVIER B, <i>et al.</i> "Localisation of members of the notch system and the differentiation of vibrissa hair follicles: receptors, ligands, and fringe modulators" <i>Dev Dyn</i> 2000 July;218(3):426-37.
		FERRARIS <i>et al.</i> , 1997, "Adult epidermal keratinocytes are endowed with pilosebaceous forming abilities" <i>Int. J. Dev. Biol.</i> , 41:491-498
		FOITZIK, <i>et al.</i> , (2000) "Control of murine hair follicle regression (catagen) by TGF-B1 in vitro", <i>Catagen Induction by TGF-B1, The FASEB Journal</i> , Vol. 14, 752-760.
		FUJIE <i>et al.</i> (2001) "The chemotactic effect of a dermal papilla cell-derived factor on outer root sheath cells," <i>J. Dermatol. Sci.</i> 25(3):206-12.
		GAMBARDELLA <i>et al.</i> , (2000) "Pattern of Expression of the Transcription Factor Krox-20 in mouse hair follicle", <i>Mech. Of Dev.</i> 96:215-218
		HAGE JJ and Freerk GB, (1991) "Surgical Depilation for the Treatment of Pseudofolliculitis or Local Hirsutism of the Face: Experience in the First 40 Patients" <i>Surgical Depilation for Pseudofolliculitis</i> , 88(3) 446-451.
		HARDY M, (1949) " The development of mouse hair in vitro wit some observations on pigmentation" <i>J. Anat.</i> , 83:364-384.
		HARDY, M., (1992) "The Secret Life of the Hair Follicle," <i>Trends in Genetics</i> 8:55-61.
		HAYNESWORTH, <i>et al.</i> , (1993) "Diminution of the Number of Mesenchymal Stem Cells as a Cause for Skeletal Aging" Chapter 7, 79-87.(Eds. J.A. Buckwater & V.M. Goldberg).
		HORNE <i>et al.</i> , (1992) <i>Development</i> 116(3), abstract
		HORNE, Kenneth A, <i>et al.</i> "Whisker growth induced by implantation of cultured vibrissa dermal papilla cells in the adult rat" <i>J Embryol Exp Morphol.</i> 1986 Sep;97:111-24.

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		HU M, Sabelmann EE, Lai S, Timek EK, Zhang F, Hentz, VR and Lineaweaver, CW, " <i>Journal of Biomedical Materials Research</i> , vol. 47, pages 79-84 (1999).
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			Application Number	10/810,518	
			Filing Date	March 26, 2004	
			First Named Inventor	Thomas H. Barrows	
			Group Art Unit	1614	
Examiner Name	Unknown				
Sheet	4	of	8	Attorney Docket Number	010414-9012

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